

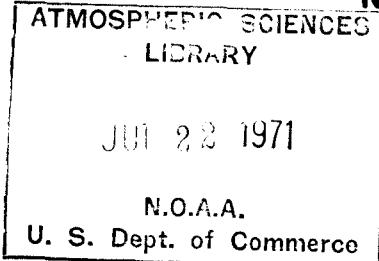


UNITED ARAB REPUBLIC

MONTHLY WEATHER REPORT

VOLUME 9

NUMBER 6



JUNE, 1966

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METEOROLOGICAL DEPARTMENT
CAIRO

National Oceanic and Atmospheric Administration

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PUBLICATIONS OF THE METEOROLOGICAL DEPARTMENT OF THE UNITED ARAB REPUBLIC—CAIRO

In fulfilment of its duties the U.A.R. Meteorological Department issues several reports and publications on weather, climate and agrometeorology. The principal publications are described on this page.

Orders for publications should be addressed to :
“The Director General, Meteorological Department, Kubri-el-Qubbeh — CAIRO”.

THE DAILY WEATHER REPORT

This report is issued daily by the Meteorological Department since the year 1901. It includes surface and upper air observations carried out by the relevant networks of the Republic at the principal hours of observations.

As from January 1968 this report was revised to include a condensed representative selection of surface and upper air observations besides the 1200 U.T. surface & 500 mb charts.

THE MONTHLY WEATHER REPORT

First issued in 1909, the Monthly Weather Report served to give a brief summary of the weather conditions that prevailed over Egypt during the month, with a table showing the mean values for few meteorological elements and their deviations from the normal values. From 1954 to 1957 this report was in a rapid state of development and extension resulting into a voluminous report on January 1958 giving surface, upper air, and agro-meteorological data for U.A.R.

As from January 1964, the Monthly Weather Report was pressed to give climatological data for a representative selection of synoptic stations.

THE AGRO-METEOROLOGICAL ABRIDGED MONTHLY REPORT

Gives a review of weather experienced in the agro-meteorological stations of the U.A.R. as well as monthly values of certain elements.

THE ANNUAL REPORT

This report gives annual values and statistics for the various meteorological elements, together with a summary of the weather conditions that prevailed during all months of the year.

CLIMATOLOGICAL NORMALS FOR EGYPT

A voluminous edition was issued in March 1968 which brings normals and mean values up till 1960.

METEOROLOGICAL RESEARCH BULLETIN

First issued in January 1969 on a bi-annual basis. It includes research works carried out by members of staff of “The Meteorological Institute for Research and Training” and the Operational Divisions of Meteorological Department.

TECHNICAL NOTES

As from October 1970, the Meteorological Department started to issue a new series of publications in the form of Technical Notes (non periodical) on subjects related to studies and applications of meteorology in different fields for the benefit of personnel working in these fields.

The first Technical Note I was issued in October 1970 on : Sandstorms & Duststorms in the U.A.R.



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Note : For explanatory notes on the tables please refer to volume 9 number 1 (January 1966).

GENERAL SUMMARY OF WEATHER CONDITIONS

JUNE 1966

Generally mild in the northern parts, hot in the middle parts and excessively hot in the southern parts intervened with four variant heat waves. Occasional rising sand accompanying break down of the first and second heat waves. Light rain over Farafra on the 5th and Sallum on the 7th.

GENERAL DESCRIPTION OF WEATHER

The northern parts of the Republic experienced an excessive heat wave on the first two days, a moderate heat wave on the 7th and enjoyed mild summer weather during rest of the month. In the central parts the prevailing weather was hot intervened with three short excessive heat waves round the 2nd, 9th and 18th. In the southern parts four excessive heat waves prevailed most of the month; particularly on the 9th & 10th when abnormally excessive hot climaxes were experienced with maximum air temperature attaining 48°C between Luxor and Aswan.

Break down of the first and second heat waves was associated with rising sand in scattered localities and was followed by light rain over Farafra on the 5th and Sallum on the 7th.

PRESSURE DISTRIBUTION

The prevailing pressure systems over the surface maps during this month were :

— High pressure extending from the Azores to West Mediterranean.

— Travelling low pressure systems through North Europe and their attached secondaries over Italy and North Balkans.

— A ridge of high pressure over Central Mediterranean and NE Africa.

— Complex monsoon low pressure system over the Arabian Gulf, Arabia and Sudan.

— Two transitory khamsin depressions through the northern parts of U.A.R.

During this month the barometric pressure in U.A.R. showed frequent oscillations generally of small amplitudes and experienced consecutive falls during the periods (1st—3rd), (8th — 9th), (11th — 13th), (17th — 19th), (22nd — 23rd) and (26th — 27th).

The first pressure fall was due to the appearance of a shallow secondary low over the Gulf of Serte on the 1st. It moved eastwards, passed through the northern parts of U.A.R. on the 2nd and then proceeded NE wards through East Mediterranean on the 3rd and through Iraq on the 4th.

The second fall in pressure associated the northward elongation of the Sudan trough on the 8th and 9th.

The third pressure fall was observed on the 12th & 13th as a result of the westward elongation of Iraq monsoon trough through East Mediterranean.

The fourth fall in pressure over U.A.R. was observed during the transit of the second secondary low which developed over the Gulf of Serte on the 16th, proceeded eastwards and passed through East Mediterranean on the 18th.

On the 22nd and 23rd the Sudan trough showed a second northward elongation causing the fifth fall in pressure over U.A.R. during this month.

On the 25th a depression north of the Balkans was moving eastwards ; while Asia Minor was a loose pressure gradient area and accordingly the Iraq Monsoon low showed a marked westward elongation towards East Mediterranean giving the sixth and last fall in the pressure over U.A.R. during this month.

Apart from the above mentioned periods of pressure fall, a local anticyclone established over Central & East Mediterranean where the barometric pressure was generally above normal.

On the other hand the pressure distribution over the 700 & 500 mb upper charts were :

— Two main upper lows one over North Atlantic and the other over North Russia.

— Two transitory upper secondary lows between latitudes 30 °N, 45 °N traversing East Mediterranean on the 10th & 20th respectively.

— Quasi-stationary upper high pressure belt over subtropical latitudes south of latitude 30°N.

The highest wind speed in the upper air at Mersa Matruh, Helwan & Aswan was 122, 143 & 75 Knots on the 28th, 7th & 5th respectively.

SURFACE WIND

The prevailing winds were light to moderate Nly & NWly in general.

Fresh to strong winds blew occasionally on most days of the month in the western part of the Mediterranean and Red Sea districts; otherwise they blew on few days mainly by the break down of the heat waves. Calms were

frequent during night and early morning intervals in scattered parts.

Gales were reported at : El Kasr on the 2nd and at Hurghada on the 4th, 11th & 12th.

TEMPERATURE

Maximum temperature oscillated slightly round its normal most days of the month in the northern and central parts with departure from normal 1 °C — 3 °C and its values ranged generally between 26, 29°C in the northern parts and between 33, 37 °C in the central parts. In the southern parts maximum temperature was excessive and its values ranged between 40 °C, 45 °C.

The absolute maximum temperature for the Republic was 48.8 °C reported at Kena on the 10th.

Minimum temperature oscillated slightly round its normal most days of the month in the northern and central parts with departure from normal 1 °C — 2 °C and its values ranged generally between 17 °C, 21 °C in the northern parts and between 19°C, 22°C in the central parts. In the southern parts minimum temperature ranged between 23°C, 26 °C (1 °C — 3 °C above normal) during the first ten days and between 20°C — 23 °C during rest of the month.

The absolute minimum temperature for the Republic was 12.8 °C reported at El Kasr on the 16th.

PRECIPITATION

This month was almost rainless with the exception of light rain over the western part on the 5th & 7th.

The maximum daily rainfall was 2.6 mms. reported at Farafra on the 5th which was also the maximum monthly rainfall.

Cairo, March 1971

M. F. TAHA
Under Secretary of State
Director General
Meteorological Department

Table A 1.—MONTHLY VALUES OF THE ATMOSPHERIC PRESSURE, AIR TEMPERATURE,
RELATIVE HUMIDITY, BRIGHT SUNSHINE DURATION & PICHE EVAPORATION.

JUNE — 1966

STATION	Atmospheric Pressure (mbs) M.S.L		Air Temperature °C								Relative Humidity %		Bright Sunshine Duration (Hours)			Piche Evaporation mm. Mean	
			Maximum		Minimum		A+B 2	Dry Bulb		Wet Bulb		Mean	D.F. Normal or Average	Total Actual	Total Possible	%	
	Mean	D.F. Normal or Average	(A) Mean	D.F. Normal or Average	(B) Mean	D.F. Normal or Average		Mean	D.F. Normal or Average	Mean	D.F. Normal or Average						
Sallum	1013.0	+0.3	29.6	+0.1	19.8	-0.0	24.7	24.6	-0.1	18.9	-0.8	56	-5	-	-	-	11.3
Mersa Matruh (A)	1012.8	+0.2	28.1	+0.1	18.5	-0.3	23.3	23.2	-0.1	19.4	-0.2	68	-1	-	-	-	7.6
Alexandria . . . (A)	1011.9	+0.2	29.6	+1.2	20.3	-0.1	25.0	24.3	-0.1	20.4	-0.1	69	-2	335.1	424.1	79	7.5
Port Said . . . (A)	1010.9	0.0	27.7	-0.8	23.7	-1.3	25.7	25.5	-0.7	21.6	-0.2	69	-2	334.1	424.1	79	6.8
El Arish	1011.1	+0.5	29.5	+0.6	19.6	-0.7	24.6	24.7	0.0	21.7	-0.5	76	+4	-	-	-	5.1
Ghazza	1010.6	0.0	28.4	+1.3	19.8	-0.3	24.1	24.2	-0.2	21.0	-0.1	74	-2	359.9	425.4	85	4.7
Tanta	1010.5	-1.3	34.1	-0.1	19.2	-1.8	26.6	26.0	-0.1	20.4	-0.8	58	+5	362.4	422.4	87	7.6
Cairo (A)	1010.8	0.0	35.2	-0.5	20.7	-0.3	25.0	27.4	-0.2	19.4	-0.2	43	-3	-	-	-	22.7
Fayoum	1010.7	+0.9	36.4	-0.4	20.6	-0.7	28.5	26.3	-0.6	19.3	-0.2	39	+2	-	-	-	13.3
Minya (A)	1009.4	-0.3	37.8	-1.4	19.8	-0.8	28.8	28.8	-1.0	19.2	-0.2	36	-4	370.2	416.1	89	16.1
Assyout (A)	1008.6	-0.3	38.3	-0.6	22.6	-1.0	30.4	30.4	-0.4	18.2	-0.1	25	-1	-	-	-	26.4
Luxor (A)	1007.0	+0.3	41.9	-0.9	23.3	-0.7	32.6	33.2	-0.6	19.6	-0.3	23	0	-	-	-	17.6
Aswan (A)	1006.4	+0.3	42.5	-0.3	23.6	-0.6	33.0	34.2	-0.3	17.7	-0.2	12	0	-	-	-	22.8
Siwa	1011.9	+0.1	37.0	-0.3	20.6	-1.2	28.8	29.1	-0.2	18.1	-0.2	29	-1	-	-	-	19.5
Bahariya	1010.6	+0.7	37.4	-0.9	21.3	-1.8	29.4	29.5	-0.3	18.4	-0.0	29	-1	-	-	-	14.4
Farafra	1011.6	+0.1	36.5	-1.2	19.2	-1.9	27.8	28.0	-1.5	18.2	-1.3	34	+12	-	-	-	21.3
Dakhla	1009.5	+0.7	39.3	-0.8	22.3	-0.2	30.8	31.1	-0.0	17.6	-0.4	20	+2	-	-	-	25.6
Kharga	1008.3	+0.5	40.3	-1.1	24.6	-1.4	32.4	32.9	-0.4	17.8	-0.2	21	+1	376.4	410.3	91	30.2
Tor	1007.4	+0.4	33.4	-0.1	23.5	-0.2	28.4	27.6	-0.1	21.4	-0.2	55	-1	-	-	-	14.8
Hurghada	1006.8	0.0	33.8	-1.9	24.2	-0.5	29.0	29.2	-0.6	20.2	-0.2	40	-4	-	-	-	24.0
Quseir	1007.6	+0.5	32.0	-0.4	24.6	-0.9	28.3	28.6	-0.6	20.6	-0.2	46	-2	-	-	-	20.3

TABLE A2.— MAXIMUM AND MINIMUM AIR TEMPERATURES

JUNE — 1966

Station	Maximum Temperature °C						Mean	D. From Normal	Minimum Temperature °C									
	Highest	Date	Lowest	Date	No. of Days with Max-Temp.					Highest	Date	Lowest	Date	No. of Days with Min. Temp.				
					>25	>30	>35	>40	>45					<10	<5	<0	<-5	
Sallum	43.2	1	24.5	5	29	12	2	1	0	19.7	—	23.7	26	16.7	5	0	0	0
Mersa Matruh . . (A)	42.4	2	23.3	5	28	4	2	2	0	—	—	22.0	18	13.2	6	0	0	0
Alexandria . . . (A)	40.6	2	25.8	4	30	6	3	1	0	—	—	23.4	27	15.7	16	0	0	0
Port Said . . . (A)	31.2	3	25.2	6	30	3	0	0	0	22.1	—	27.5	26	21.8	6	0	0	0
El Arish	42.1	3	25.5	6	30	8	1	1	0	17.8	—	21.8	28	16.8	6	0	0	0
Ghazza	38.8	3	25.9	5	29	1	1	0	0	19.1	—	24.2	29	18.0	6,7,8	0	0	0
Tanta	40.4	2	31.1	29	30	30	7	2	0	—	—	21.4	19	16.3	17	0	0	0
Cairo (A)	43.8	9	31.6	29	30	30	15	3	0	—	—	25.3	1	17.2	6	0	0	0
Fayoum	42.1	9	32.4	5	30	30	18	5	0	18.3	—	23.2	19	18.6	16	0	0	0
Minya (A)	44.6	9	34.0	14	30	30	25	7	0	18.1	—	24.8	1	16.4	17	0	0	0
Assyout (A)	44.8	8	32.4	14	30	30	24	9	0	20.5	—	26.4	3	19.5	17	0	0	0
Luxor (A)	47.8	9,10	36.0	14	30	30	21	6	18.3	—	—	28.2	10	19.0	17	0	0	0
Aswan (A)	48.1	10	38.0	12	30	30	25	6	—	—	—	28.8	10	20.5	15	0	0	0
Siwa	43.2	1	32.7	5	30	30	20	4	0	19.1	—	27.8	2	15.8	15	0	0	0
Bahariya	44.0	2	32.1	14	30	30	25	4	0	19.7	—	25.7	2	17.5	14	0	0	0
Farafra	43.2	8	31.2	14	30	30	22	4	0	18.8	—	23.6	9	15.0	1	0	0	0
Dakhla	46.7	8	32.6	14	30	30	28	13	1	—	—	27.2	9	15.7	17	0	0	0
Kharga	46.4	8	35.0	13	30	30	29	15	2	22.9	—	30.5	9	17.7	17	0	0	0
Tor	41.4	2	29.3	30	30	28	6	1	0	—	—	26.7	27	20.2	19	0	0	0
Hurghada	39.2	3	30.4	14	30	30	7	0	0	22.6	—	26.9	10,11	21.0	3	0	0	0
Quseir	36.4	3	29.7	16	30	26	2	0	0	23.1	—	27.2	10	22.6	3,6	0	0	0

TABLE A 3.—SKY COVER AND RAINFALL

JUNE — 1966

Station	Mean Sky Cover Oct.					Rain fall mms.												
	00	06	12	18	Daily	Total	Normal D. From Normal	Max. Fall in one day	Number of Days with Amount of Rain									
	U.T.	U.T.	U.T.	U.T.	Mean	Amount			Amount	Date	<0.1	≥0.1	≥1.0	≥5.0	≥10	≥25	≥50	
Salium	1.0	1.7	1.2	0.9	1.1	0.2	+ 0.1	0.2	7		0	1	0	0	0	0	0	
Mersa Matruh . . . (A)	0.6	2.4	1.2	1.6	1.2	0.0	- 3.1	0.0			0	0	0	0	0	0	0	
Alexandria (A)	1.6	1.9	1.6	1.6	1.6	0.0	- Tr.	0.0			0	0	0	0	0	0	0	
Port Said (A)	0.7	1.5	0.3	0.5	0.8	0.0	0.0	0.0			0	0	0	0	0	0	0	
El Arish	1.7	2.0	0.5	0.9	1.2	0.0	0.0	0.0			0	0	0	0	0	0	0	
Ghazza	2.7	2.0	0.6	2.0	1.7	0.0	- 0.1	0.0			0	0	0	0	0	0	0	
Tanta	0.7	1.5	0.9	0.5	0.8	0.0	0.0	0.0			0	0	0	0	0	0	0	
Cairo (A)	2.2	2.9	1.3	0.8	1.7	0.0	- 0.2	0.0			0	0	0	0	0	0	0	
Fayoum	—	1.0	0.6	0.7	—	0.0	- 0.0	0.0			0	0	0	0	0	0	0	
Minya (A)	0.5	0.6	0.4	0.4	0.5	0.0	- 0.0	0.0			0	0	0	0	0	0	0	
Assyout (A)	0.3	0.6	0.1	0.2	0.2	0.0	- Tr.	0.0			0	0	0	0	0	0	0	
Luxor (A)	0.2	0.1	0.1	0.4	0.2	0.0	- 0.0	0.0			0	0	0	0	0	0	0	
Aswan (A)	0.6	0.6	0.6	0.8	0.6	0.0	- 0.0	0.0			0	0	0	0	0	0	0	
Siwa	0.4	0.8	0.6	0.7	0.2	0.0	0.0	0.			0	0	0	0	0	0	0	
Bahariya	0.4	0.8	0.7	0.4	0.6	0.0	- 0.2	0.0			0	0	0	0	0	0	0	
Farafra	—	0.4	0.8	0.5	—	2.6	+ 2.6	2.6		5	0	1	0	0	0	0	0	
Dakhla	0.3	0.4	0.4	0.4	0.4	0.0	- Tr.	0.0			0	0	0	0	0	0	0	
Kharga	0.2	0.2	0.2	0.3	0.3	0.0	- 0.0	0.0			0	0	0	0	0	0	0	
Tor	0.4	0.5	0.1	0.4	0.3	0.0	0.0	0.0			0	0	0	0	0	0	0	
Hurghada	0.2	0.2	0.1	0.3	0.2	0.0	0.0	0.0			0	0	0	0	0	0	0	
Quseir	0.3	0.1	0.1	0.3	0.2	0.0	- Tr.	0.0			0	0	0	0	0	0	0	

TABLE A 4. -- DAYS OF OCCURRENCE OF MISCELLANEOUS WEATHER PHENOMENA.

JUNE 1966

Station	Precipitation				Frost	Thunderstorm,	Mist Vis ≥ 1000 metres	Fog Vis <1000 Metres	Haze Vis ≥ 1000 Metres	Thick Haze Vis <1000 Metres	Dust or Sandstorm Vis ≥ 1000 Metres	Dust or Sandstorm Vis <1000 Metres	Gale	Clear Sky	Cloudy Sky	
	Rain	Snow	Ice, Pellets	Hail												
Ballum	1	0	0	0	0	0	0	0	0	0	3	2	0	26	0	0
Mersa Matruh	(A)	0	0	0	0	0	7	0	0	0	3	1	0	25	0	0
Alexandria	(A)	0	0	0	0	0	5	1	0	0	3	0	0	19	0	0
Port Said	(A)	0	0	0	0	0	0	0	2	0	1	0	0	29	0	0
El Arish	0	0	0	0	0	0	6	0	0	0	1	0	0	24	0	0
Ghazza	0	0	0	0	0	0	4	1	0	0	0	0	0	19	0	0
Tanta	0	0	0	0	0	0	5	0	0	0	0	0	0	24	0	0
Cairo	(A)	0	0	0	0	0	9	1	8	0	4	0	0	20	0	0
Fayoum	0	0	0	0	0	0	0	0	0	0	0	0	0	—	—	—
Minya	(A)	0	0	0	0	0	0	0	0	0	0	0	0	27	0	0
Assyout.	(A)	0	0	0	0	0	0	0	5	0	5	0	0	29	0	0
Luxor	(A)	0	0	0	0	0	0	0	3	0	1	0	0	29	0	0
Aswan	(A)	0	0	0	0	0	0	0	2	0	9	0	0	29	0	0
Siwa	0	0	0	0	0	0	0	0	0	0	1	0	0	25	0	0
Bahariya	0	0	0	0	0	0	0	0	0	0	0	0	0	28	0	0
Farafra	1	0	0	0	0	0	0	0	0	0	4	0	0	—	—	—
Dakhla	0	0	0	0	0	0	0	2	0	0	5	0	0	27	0	0
Kharga	0	0	0	0	0	0	0	0	0	0	5	0	0	28	0	0
Tor	0	0	0	0	0	0	5	0	0	0	9	0	0	29	0	0
Hurghada	0	0	0	0	0	0	0	0	0	0	1	0	0	29	0	0
Quseir	0	0	0	0	0	0	0	0	0	0	2	0	0	30	0	0

TABLE A 5.—NUMBER IN HOURS OF OCCURRENCES OF CONCURRENT SURFACE WIND SPEED AND DIRECTION RECORDED WITHIN SPECIFIED RANGES

JUNE — 1966

Station	calm (hours)	Variable (hours)	Unrecorded (hours)	Wind speed in knots	Number in hours of occurrences of wind blowing from the ranges of directions indicated													All directions
					345	015	045	075	105	135	165	195	225	255	285	315		
					/ 014	/ 044	/ 074	/ 104	/ 134	/ 164	/ 194	/ 224	/ 254	/ 284	/ 314	/ 344		
Sallum	28	3	0	1—10	63	46	59	40	1	8	10	5	2	14	65	105	418	
				11—27	34	23	25	0	0	5	0	15	4	2	105	58	271	
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0	
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0	
				All speeds	97	69	84	40	1	13	10	20	6	16	170	163	689	
Mersa Matruh (A)	14	0	29	1—10	109	0	14	9	22	14	6	1	4	23	83	49	334	
				11—27	138	0	3	11	27	7	11	6	1	0	19	116	339	
				28—47	0	0	0	0	0	0	0	4	0	0	0	0	0	
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0	
				All speeds	247	0	17	20	49	21	17	11	5	23	102	165	677	
Alexandria . . (A)	4	0	0	1—10	64	30	40	22	26	16	5	2	1	23	128	195	552	
				11—27	16	12	18	0	0	0	0	0	0	0	77	41	164	
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0	
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0	
				All speeds	80	42	58	22	26	16	5	2	1	23	205	236	716	
Port Said . . (A)	0	0	40	1—10	107	0	31	24	8	14	5	0	8	41	24	49	311	
				11—27	192	0	13	1	0	8	0	0	6	25	40	84	369	
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0	
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0	
				All speeds	299	0	44	25	8	22	5	0	14	66	64	133	680	
Tanta	10	0	5	1—10	113	57	42	41	3	0	2	0	0	0	94	98	197	683
				11—27	3	11	2	0	0	0	0	0	0	0	0	0	6	23
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	116	68	44	41	3	0	2	0	0	0	94	98	203	705
Cairo . . . (A)	6	1	4	1—10	81	61	41	11	1	1	0	1	0	1	13	63	102	383
				11—27	68	98	50	28	10	5	0	0	1	5	13	48	326	
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	149	159	91	39	11	6	0	1	3	24	76	150	709	
Fayoum	2	12	1	1—10	441	60	9	2	2	2	1	4	4	11	24	138	698	
				11—27	4	0	0	0	0	0	0	0	0	0	0	0	3	7
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	445	60	9	2	2	2	1	4	4	11	24	141	705	
Minya . . . (A)	0	4	0	1—10	216	6	4	1	1	4	4	0	4	5	10	193	448	
				11—27	174	1	1	0	0	0	0	0	0	0	5	87	268	
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	390	7	5	1	1	4	4	0	4	5	15	280	716	

Table A 5. (contd.)—NUMBER IN HOURS OF OCCURRENCES OF CONCURRENT SURFACE WIND SPEED AND DIRECTION RECORDED WITHIN SPECIFIED RANGES

JUNE — 1966

Station	calm (hours)	Variable (hours)	Unrecorded (hours)	Wind speed in knots	Number in hours of occurrences of wind blowing from the ranges of directions indicated													All directions
					345	015	045	075	105	135	165	195	225	255	285	315		
					014	044	074	104	134	164	194	224	254	284	314	344		
Assyout . . . (A)	3	0	0	1—10	10	10	4	5	4	2	5	31	8	117	201	123	520	
				11—27	16	8	5	1	0	0	0	0	0	1	41	125	197	
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0	
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0	
				All speeds	26	18	9	6	4	2	5	31	8	118	242	248	717	
Luxor . . . (A)	8	0	2	1—10	37	30	25	10	17	34	83	57	50	87	145	131	706	
				11—27	0	0	0	0	0	0	0	0	0	0	1	3	4	
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0	
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0	
				All speeds	37	30	25	10	17	34	83	57	50	87	146	134	710	
Aswan . . . (A)	0	0	0	1—10	184	171	11	0	2	0	2	1	1	4	39	138	553	
				11—27	100	34	0	0	0	0	0	0	0	0	1	32	167	
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0	
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0	
				All speeds	284	205	11	0	2	0	2	1	1	4	40	170	720	
Siwa	10	0	45	1—10	86	47	5	7	7	2	1	0	0	3	32	115	305	
				11—27	192	52	1	0	0	0	0	0	0	0	1	113	360	
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0	
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0	
				All speeds	278	99	6	7	7	2	1	0	0	3	33	228	665	
Kharga	03	11	0	1—10	62	92	56	51	24	8	6	3	8	45	62	76	493	
				11—27	41	39	11	19	13	5	9	1	4	18	27	26	213	
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0	
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0	
				All speeds	103	131	67	70	37	13	15	4	12	63	89	102	706	
Dakhla	0	0	78	1—10	81	74	102	42	13	11	19	11	10	37	67	131	598	
				11—27	2	0	17	1	0	0	0	0	0	0	5	19	44	
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0	
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0	
				All speeds	83	74	119	43	13	11	19	11	10	37	72	150	642	
Hurghada	5	0	0	1—10	12	13	7	3	2	13	0	0	0	4	31	49	134	
				11—27	200	41	0	0	0	0	0	0	0	0	0	59	237	587
				28—47	6	0	0	0	0	0	0	0	0	0	0	0	38	44
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	218	54	7	3	2	13	0	0	0	4	30	324	715	
Quseir	2	15	3	1—10	191	95	14	5	1	4	19	7	5	12	29	105	487	
				11—27	176	19	0	0	0	0	0	0	0	0	0	17	212	
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0	
				≥48	1	0	0	0	0	0	0	0	0	0	0	0	1	
				All speeds	368	114	14	5	1	4	19	7	5	12	29	132	700	

TABLE B 1 (contd.).—UPPER AIR CLIMATOLOGICAL DATA

JUNE—1966

Station	Pressure Surface Millibar	Altitude of Pressure Surface (gpm)				Temperature (°C)				Dew Point (°C)	
		N	Mean	Highest	Lowest	N	Mean	Highest	Lowest	N	Mean
Helwan 0000 U.T.	Surface	28	995m.b.	998m.b.	990m.b.	28	22.7	28.4	20.3	28	14.5
	1000	28	92	123	47	—	—	—	—	—	—
	850	28	1502	1530	1480	28	10.8	25.1	16.0	19	0.1
	700	28	3142	3186	3000	28	10.6	13.8	5.9	11	8.4
	600	28	4408	4453	4363	28	2.1	6.4	—1.4	8	—13.0
	500	28	5852	5902	5800	28	—8.1	—4.2	—12.8	3	—24.6
	400	28	7547	7613	7484	28	—20.3	—13.3	—25.6	3	—29.9
	300	28	9819	9727	9517	28	—34.7	—27.9	—40.6	2	—43.2
	200	28	12312	12486	12198	28	—52.2	—49.0	—57.6	—	—
	150	28	14166	14322	14019	28	—61.8	—57.2	—65.2	—	—
	100	27	16606	16740	16495	27	—71.4	—65.2	—76.2	—	—
	70	25	18718	18870	18620	25	—87.1	—63.9	—70.5	—	—
	60	25	19857	19812	19559	25	—60.4	—59.5	—68.1	—	—
	50	24	20790	20957	20689	24	—59.0	—55.5	—61.8	—	—
	40	23	22199	22377	22083	23	—55.9	—54.0	—58.1	—	—
	30	21	24040	24172	23917	21	—52.7	—50.5	—55.2	—	—
	20	12	26667	26847	26550	12	—46.5	—44.6	—48.5	—	—
	10	—	—	—	—	—	—	—	—	—	—
Aswan 0000 U.T.	Surface	29	985m.b.	987m.b.	982m.b.	28	28.2	35.0	24.5	29	4.5
	1000	28	59	80	36	—	—	—	—	—	—
	850	29	1447	1519	1457	29	25.7	31.1	19.8	17	—0.8
	700	29	3165	3199	3105	29	13.4	16.7	9.9	11	—6.6
	600	29	4439	4482	4371	29	4.0	7.7	1.1	11	—11.0
	500	26	5892	5930	5859	28	—5.7	—2.8	—9.2	4	—19.0
	400	28	7606	7654	7541	28	—16.3	—13.3	—20.7	2	—29.9
	300	28	9712	9774	9618	28	—31.7	—27.8	—36.9	—	—
	200	27	12450	12554	12279	27	—50.1	—47.9	—58.7	—	—
	150	26	14268	14378	14165	26	—62.1	—61.6	—67.7	—	—
	100	26	16873	16789	16569	26	—76.1	—70.3	—79.5	—	—
	70	19	18744	18900	18600	19	—71.3	—64.8	—78.1	—	—
	60	10	19725	19831	19599	10	—63.8	—61.2	—66.0	—	—
	50	10	20852	20961	20725	16	—61.3	—56.2	—64.6	—	—
	40	8	22242	22332	22115	8	—56.6	—54.3	—59.0	—	—
	30	7	24069	24187	23957	7	—52.7	—48.8	—56.3	—	—
	20	6	26743	26859	26698	6	—47.7	—45.0	—49.1	—	—
	10	—	—	—	—	—	—	—	—	—	—

Note : Climatological upper air data for Mersa Matruh is missing since number of days of radiosonde sets at this station are less than the permissible number needed for calculating or processing monthly values.

N = The number of cases the element has been observed during the month.

* The atmospheric pressure corrected to the elevation of the radiosonde stations.

TABLE B 1. (Contd.)—UPPER AIR CLIMATOLOGICAL DATA

JUNE ~ 1966

Station	Pressure Surface (Millibar)	Altitude of Pressure Surface (gpm)				Temperature (°C)				Dew Point (°C)	
		N	Mean	Highest	Lowest	N	Mean	Highest	Lowest	N	Mean
Helwan 1200 U.T.	Surface	30	994m.b.	998m.b.	991m.b.	30	34.2	42.2	30.1	30	8.8
	1000	30	87	122	57	—	—	—	—	—	—
	850	30	1520	1545	1488	30	20.9	29.1	15.0	26	1.8
	700	30	3167	3222	3107	30	11.9	15.3	6.2	10	—7.2
	600	30	4439	4503	4396	30	3.1	6.8	—2.0	5	—16.9
	500	30	5884	5940	5793	30	—7.1	—3.5	—11.0	4	—21.1
	400	30	7587	7670	7475	30	—18.8	—12.0	—24.5	2	—29.6
	300	30	9672	9810	9526	30	—31.9	—25.7	—41.6	2	—42.8
	200	30	12415	12616	12190	30	—50.7	—46.8	—58.0	—	—
	150	30	14217	14484	14023	30	—60.3	—55.0	—64.6	—	—
	100	29	16774	16905	16511	29	—70.6	—65.9	—75.0	—	—
	70	27	18844	19000	18670	27	—66.3	—61.2	—70.8	—	—
	60	26	19793	19954	19610	26	—61.3	—58.1	—65.4	—	—
	50	23	20931	21089	20764	23	—56.1	—53.0	—59.8	—	—
	40	18	22342	22492	22192	18	—53.0	—49.5	—56.0	—	—
	30	12	24205	24366	24057	15	—49.2	—46.3	—51.4	—	—
	20	6	26852	27050	26734	6	—44.6	—42.4	—45.8	—	—
	10	—	—	—	—	—	—	—	—	—	—
Aswan 1200 U.T.	Surface	29	984m.b.	987m.b.	982m.b.	29	40.9	47.0	36.5	29	4.2
	1000	29	53	81	28	—	—	—	—	—	—
	850	29	1516	1539	1488	29	23.1	34.8	22.2	10	—3.2
	700	29	3182	3230	3129	29	14.2	20.3	11.5	12	—11.2
	600	29	4460	4506	4427	29	4.5	9.0	2.5	9	—14.6
	500	29	5918	5962	5883	29	—5.1	0.1	—8.4	4	—17.9
	400	29	7636	7694	7592	29	—16.1	—13.0	—20.8	—	—
	30	27	9744	9829	9681	27	—29.0	—24.8	—35.0	1	—40.9
	200	25	12507	12632	12399	25	—59.3	—46.4	—54.5	—	—
	150	25	14318	14474	14193	25	—60.4	—57.2	—65.4	—	—
	100	23	16753	16924	16599	23	—75.3	—69.0	—79.5	—	—
	70	12	18862	19070	18734	12	—68.1	—65.5	—	—	—
	60	9	19703	20003	19653	9	—62.2	—59.4	—65.5	—	—
	50	9	20960	21163	20806	9	—58.3	—52.5	—60.2	—	—
	40	7	22394	22627	22248	7	—51.9	—45.2	—54.0	—	—
	30	7	24271	24565	24130	7	—48.9	—41.2	—52.5	—	—
	20	4	26925	26986	26880	4	—42.4	—41.0	—45.0	—	—
	10	—	—	—	—	—	—	—	—	—	—

Note : Climatological upper air data for Mersa Matruh is missing since number of days of radiosonde sets at this station are less than the permissible number needed for calculating or processing monthly values.

N = The number of cases the element has been observed during the month.

* The atmospheric pressure corrected to the elevation of the radiosonde stations.

TABLE B 2.—MEAN AND EXTREME VALUES OF THE FREEZING LEVEL AND THE TROPOPAUSE ;
THE HIGHEST WIND SPEED IN THE UPPER AIR

JUNE — 1966

Station	Freezing Level								First Tropopause								Highest wind speed						
	Mean			Highest			Lowest		Mean			Highest			Lowest								
	Altitude (gpm)	Pressure (mb.)	Dew Point (°C)	Altitude (gpm)	Pressure (mb.)	Dew Point (°C)	Altitude (gpm)	Pressure (mb.)	Dew Point (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Direction (000 - 360)°	Speed in Knots	
0000 U.T.	(N)	(N)	(N)	—	—	—	—	—	—	(N)	(N)	(N)	—	—	—	—	—	—	—	—	—	—	
	M. Matruh . . .	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Helwan . . .	4710 (28)	578 (28)	-14.8 (8)	5320	537	—	4200	614	-19.1	15879 (28)	112 (28)	-70.5 (26)	17800	85	-76.0	11520	223	-54.8	8740	335	240	136
1200 U.T.	M. Matruh . . .	(N)	(N)	(N)	—	—	—	—	—	(N)	(N)	(N)	—	—	—	—	—	—	—	—	—	—	—
	Helwan . . .	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Aswan . . .	5040 (29)	557 (29)	-11.6 (7)	5530	521	—	4710	580	—	16534 (21)	103 (21)	-76.3 (21)	17780	84	-78.0	15180	128	-69.0	12850	185	220	75
	M. Matruh . . .	(N)	(N)	(N)	—	—	—	—	—	(N)	(N)	(N)	—	—	—	—	—	—	—	—	—	—	—
	Helwan . . .	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Aswan . . .	4879 (30)	568 (30)	-16.0 (4)	5460	531	—	4130	622	-13.8	15353 (28)	132 (28)	-67.6 (28)	17750	85	-69.7	9920	286	-41.4	13390	169	250	143
	M. Matruh . . .	(N)	(N)	(N)	—	—	—	—	—	(N)	(N)	(N)	—	—	—	—	—	—	—	—	—	—	—
	Helwan . . .	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Aswan . . .	5149 (29)	550 (29)	-17.0 (5)	5360	499	—	4750	578	-18.7	16394 (17)	103 (17)	-69.5 (17)	17780	83	-77.2	13070	183	-55.0	11130	226	240	71

N = The number of cases the element has been observed during the month .

— II —

TABLE B 3 (contd.)—NUMBER OF OCCURRENCES OF WIND DIRECTION WITHIN SPECIFIED RANGES AND THE MEAN SCALAR WIND SPEED AT THE STANDARD AND SELECTED PRESSURE SURFACES.

HELWAN—JUNE 1966

Time	Pressure Surface (Millibar.)	Wind between ranges of direction (000–360)°														Number of Calm winds	Total Number of Observations (TN)	Mean Scalar wind Speed (Knots)										
		345 / 014		015 / 014		0 5 / 074		075 / 104		105 / 134		135 / 164		165 / 194		195 / 224		225 / 254		255 / 284		285 / 311						
		N (°)	m	N (ft)	m	N (°)	m	N (ft)	m	N (°)	m	N (ft)	m	N (°)	m	N (ft)	m	N (°)	m	N (ft)	m	N (°)	m					
0000 U.T.	Surface	10	9	7	12	—	—	15	2	8	0	—	0	—	0	—	0	—	0	—	0	—	7	7	0	28	10	
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	850	4	15	7	12	2	14	0	—	0	—	—	0	—	0	—	2	5	2	13	2	14	9	12	0	28	12	
	700	3	14	3	15	2	8	0	—	0	—	—	0	—	0	—	3	28	8	22	7	16	2	10	0	28	18	
	600	0	—	1	10	0	—	0	—	0	—	—	0	—	1	25	4	27	12	22	6	12	4	12	0	28	19	
	500	0	—	1	11	0	—	0	—	0	—	—	0	—	2	31	8	30	12	25	4	17	1	19	0	28	25	
	400	0	—	0	—	0	—	0	—	0	—	—	0	—	2	40	10	41	11	30	4	30	1	20	0	28	35	
	300	0	—	0	—	0	—	0	—	0	—	—	0	—	4	70	10	47	12	42	0	—	0	—	0	26	48	
	200	0	—	0	—	0	—	0	—	0	—	—	0	—	2	24	1	88	11	70	8	64	0	—	0	22	65	
	150	0	—	0	—	0	—	0	—	0	—	—	0	—	0	2	82	6	55	5	72	0	—	0	—	0	13	65
	100	0	—	0	—	0	—	0	—	0	—	—	0	—	1	16	0	—	2	51	3	81	0	—	0	—	6	60
	70	0	—	1	8	0	—	0	—	0	—	—	0	—	1	12	0	—	0	—	1	111	0	—	0	—	3	44
	60	0	—	0	—	0	—	1	6	0	—	—	0	—	0	—	0	—	0	—	0	—	0	—	0	1	6	
	50	0	—	0	—	1	24	0	—	0	—	—	0	—	0	—	0	—	0	—	0	—	0	—	0	1	24	
	40	0	—	0	—	0	—	1	23	0	—	—	0	—	0	—	0	—	0	—	0	—	0	—	0	1	23	
	30	0	—	0	—	0	—	1	10	0	—	—	0	—	0	—	0	—	0	—	0	—	0	—	0	1	10	
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
1200 U.T.	Surface	9	11	4	11	2	14	0	—	0	—	—	0	—	1	20	1	4	2	9	2	12	9	8	0	30	11	
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	1	14	2	5	1	23	4	15	3	13	0	30	13	
	850	9	13	7	14	1	10	1	6	1	6	0	—	0	—	1	34	11	21	4	11	3	11	0	30	18		
	700	2	14	3	9	1	6	2	8	0	—	—	0	—	0	—	2	26	9	20	5	11	5	12	0	30	18	
	600	1	9	1	12	0	—	0	—	0	—	—	0	—	3	33	8	30	10	25	5	17	4	14	0	30	24	
	500	0	—	0	—	0	—	0	—	0	—	—	0	—	2	41	12	43	12	31	4	30	0	—	0	30	36	
	400	0	—	0	—	0	—	0	—	0	—	—	0	—	2	56	10	64	13	52	3	38	0	—	0	29	51	
	300	1	65	0	—	0	—	0	—	0	—	—	0	—	2	64	9	64	12	56	0	—	0	—	0	24	61	
	200	0	—	0	—	0	—	0	—	0	—	—	0	—	1	70	2	64	9	64	12	56	0	—	0	20	57	
	150	0	—	0	—	0	—	0	—	0	—	—	0	—	5	55	11	50	4	79	0	—	0	—	0	10	53	
	100	0	—	0	—	0	—	0	—	0	—	—	1	18	2	40	1	17	6	69	0	—	0	—	0	4	46	
	70	0	—	0	—	0	—	0	—	1	35	1	20	0	—	0	—	2	64	0	—	0	—	0	3	42		
	60	0	—	0	—	1	47	0	—	2	40	0	—	0	—	0	—	0	—	0	—	0	—	0	3	42		
	50	0	—	0	—	0	—	3	16	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	3	16		
	40	0	—	0	—	0	—	1	13	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	1	13		
	30	0	—	0	—	0	—	0	—	1	36	0	—	0	—	0	—	0	—	0	—	0	—	0	1	36		
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		

N = The number of cases the element has been observed during the month.

TN = The total number of cases the wind has been observed for all directions during the month.

TABLE B 3 (cont'd.)—NUMBER OF OCCURRENCES OF WIND DIRECTION WITHIN SPECIFIED RANGES AND THE MEAN SCALAR WIND SPEED AT THE STANDARD AND SELECTED PRESSURE SURFACES.

ASWAN (A)— JUNE 1966

Time	Pressure Surface (Millibar)	Wind between ranges of direction (000—360)°														Number of calm winds	Total number of observations (TN)	Mean Scalar wind Speed (Knots)						
		345 / 014	015 / 044	045 / 074	075 / 104	105 / 134	135 / 164	165 / 194	195 / 224	225 / 254	255 / 284	285 / 314	315 / 344											
		N m	(ff) m	N m	(ff) m	N m	(ff) m	N m	(ff) m	N m	(ff) m	N m	(ff) m	N m										
0000 U.T.	Surface	15	9	2	8	0	—	0	—	1	14	0	—	0	—	0	—	1	6	8	0	2	29	8
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	850	4	16	9	15	1	4	0	—	1	2	1	4	0	—	3	5	2	6	2	8	2	17	4
	700	0	—	2	8	1	14	1	2	0	—	1	7	0	—	4	13	6	19	7	16	1	4	6
	600	0	—	1	7	0	—	1	16	2	16	1	16	1	7	3	13	12	16	6	10	2	15	0
	500	1	13	0	—	0	—	1	8	2	18	3	11	1	2	13	9	16	3	15	4	12	3	8
	400	1	9	1	13	0	—	0	—	0	—	1	5	3	18	4	13	11	18	4	11	6	2	20
	300	0	—	0	—	0	—	0	—	1	13	3	7	2	32	6	23	14	26	0	—	1	5	1
	200	0	—	0	—	1	3	2	4	0	—	3	21	4	24	7	37	8	46	2	30	0	—	0
	150	0	—	0	—	0	—	0	—	2	15	4	28	8	28	4	35	8	31	0	—	0	—	0
	100	0	—	0	—	0	—	0	—	1	6	6	30	6	22	7	22	3	14	0	—	0	—	1
	70	0	—	0	—	1	14	1	32	11	26	2	18	0	—	0	—	0	—	0	—	0	—	15
	60	0	—	0	—	2	27	5	20	0	—	2	82	0	—	0	—	0	—	0	—	0	—	9
	50	0	—	0	—	2	22	5	41	2	36	0	—	0	—	0	—	0	—	0	—	0	—	35
	40	0	—	0	—	2	24	5	33	0	—	0	—	0	—	0	—	0	—	0	—	0	—	7
	30	0	—	0	—	2	42	4	34	0	—	0	—	0	—	0	—	0	—	0	—	0	—	6
	20	0	—	0	—	0	—	2	37	1	37	0	—	0	—	0	—	0	—	0	—	0	—	3
	10	—	—	—	—	0	—	2	37	1	37	0	—	0	—	0	—	0	—	0	—	0	—	—
1200 U.T.	Surface	9	11	0	—	0	—	1	2	0	—	0	—	0	—	0	—	6	7	9	9	4	29	8
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	5	16	2	9	0	—	0	—	0	—	0	—	3	10	0	—	5	10	8	9	6	13	0
	700	1	5	1	9	1	1	0	—	1	5	1	6	1	21	3	14	8	23	5	15	2	8	5
	600	2	10	1	15	0	—	0	—	0	—	4	11	1	9	7	15	6	14	6	11	2	13	0
	500	1	7	0	—	0	—	0	—	1	11	0	—	6	12	4	9	7	14	5	11	1	5	4
	400	2	6	0	—	3	8	1	2	1	7	3	20	2	10	4	18	11	17	1	19	0	—	10
	300	2	8	2	4	0	—	2	12	3	11	0	—	2	24	4	22	19	30	2	23	0	—	0
	200	0	—	0	—	0	—	0	—	3	13	2	24	5	24	3	15	10	38	1	33	1	4	0
	150	0	—	0	—	0	—	0	—	0	—	7	28	5	22	6	30	3	45	1	15	0	—	1
	100	1	6	0	—	0	—	0	—	2	23	6	23	5	29	2	14	3	22	0	—	1	4	0
	70	0	—	0	—	0	—	0	—	2	26	7	26	1	25	0	—	0	—	0	—	0	—	10
	60	0	—	0	—	0	—	0	—	2	25	4	24	1	20	0	—	0	—	0	—	0	—	7
	50	0	—	0	—	0	—	4	33	3	25	0	—	0	—	0	—	0	—	0	—	0	—	30
	40	0	—	0	—	0	—	2	33	2	33	0	—	0	—	0	—	0	—	0	—	0	—	4
	30	0	—	0	—	0	—	3	22	1	30	0	—	0	—	0	—	0	—	0	—	0	—	3
	20	0	—	0	—	1	30	2	38	0	—	0	—	0	—	0	—	0	—	0	—	0	—	32
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

N = The number of cases the element has been observed during the month.

N = total number of cases the wind has been observed for all directions during the month.

REVIEW OF AGRO-METEOROLOGICAL STATIONS

EL KASR—JUNE 1966

This month was warmer than normal. Mean daily air temperature at 2 metres above ground was 0.1°C above normal. The month started with a short and remarkably intense heat wave which had the peak on the 2nd and gave rise to the absolute maximum air temperature for the month (43.2°C).

The extreme maximum soil temperatures were higher than the corresponding values of June 1965 at 0.3, 5, 10 and 100 cm. depths (the maximum difference was 2.0°C at 0.3 depth) - and lower for other depths (the maximum difference was - 2.5°C at 20cm depth). The extreme minima were lower than the corresponding values of last June for depths between 0.3 and 10 cm (the maximum difference was - 1.6°C at 1 cm. depth) but higher for other depths till 50 cm depth (the maximum difference was 0.6°C at 50 cm depth) and equal at 100 cm depth.

The mean daily wind speed at 2 m. was 0.5 m/sec. higher than the corresponding value of June 1965. Mean daily Piche evaporation was 0.1 mm lower, while mean daily pan evaporation was 1.00 mm higher than the corresponding value of last June. Total duration of bright sunshine was 8.3 hours higher than the corresponding value of June 1965.

TAHRIR—JUNE 1966

This month was slightly cooler, but fairly more humid than June 1965. Compared with the corresponding values of last June the deviations of mean air temperature, relative humidity and vapour pressure were -0.9°C , + 5% and + 0.8 mm respectively. Three heat waves occurred with peaks on the 2nd, 9th and 18th. The peak of the first wave yielded many extreme values for the month. Besides giving rise to the extreme maximum air temperature on the 2nd, it gave rise to the highest minimum air temperature, the highest daily mean air temperature, and the highest day-time mean air temperature. On that day occurred the extreme minimum relative humidity and the lowest daily-mean relative humidity and vapour pressure. Also the highest daily values of Piche and pan evaporation took place on that day.

Compared with the corresponding values of June 1965, the extreme maximum soil temperatures for depths from the surface to one metre showed negative deviations varying between 2.7 and 0.1°C . The minima, on the other hand-did not show any decided variation; the differences being irregular and small, only once reaching 1.0°C .

Mean daily wind speed at 2 m. was 0.1 m/sec higher than the corresponding value of June 1965. Mean daily Piche and pan evaporation were 3.4 and 0.45 mm lower than the corresponding values of last June. Total actual duration of bright sunshine was 6.1 hour lower than the corresponding value of June 1965.

GIZA—JUNE 1966

This month was slightly warmer than normal. Mean daily air temperature at 2 metres above ground was 0.4°C above normal. Mean daily relative humidity and mean daily vapour pressure were 1% and 0.3 mm above normal. Three heat waves occurred during the month, with peaks on 2nd, 9th and 18th. On the 2nd occurred the lowest mean relative humidity and vapour pressure and the highest Piche and pan evaporation. Extreme maximum air temperature and extreme minimum vapour pressure occurred on the 9th.

The extreme soil temperatures had complex relations to the corresponding values of last year. Compared with the corresponding values of June 1965 the extreme maxima were lower in the first 2 centimetres depth (maximum difference -6.0°C) and higher from 5 to 50 cm (maximum difference 1.8°C) and the same at 100 cm depth. Compared with the corresponding values of last June the extreme minima were higher in the first 10cm. depth (maximum difference 2.8°C), the same at 20 cm. depth and lower at 50 and 100 cm depths by 0.6°C and 0.2°C respectively.

Mean daily wind speed at 2m was 0.3 m/sec above average. Mean daily values of Piche and pan evaporation were above average by 0.3 mm and 0.39 mm respectively. Total potential evapotranspiration was less than the corresponding value of June 1965 by 26.9 mm. Total actual duration of bright sunshine was 5 hours above average, i.e. about 1% of possible duration.

KHARGA—JUNE 1966

This month was hot as compared with the normal values of air temperature of Kharga during June. The mean daily air temperature at 2 metres above ground was 3.0°C above normal. The month was characterised by a prolonged and intense heat wave between the 1st and the 10th with the peak on 8th giving rise to the absolute maximum air temperature of the month. Another heat wave occurred between the 16th and 20th with its peak on 19th when the lowest relative humidity was recorded.

The extreme maximum soil temperatures from the surface down to 50 cm depth were lower, while at 100 cm depth the value was higher than the corresponding value of June 1965. The extreme differences were -4°C and + 0.1°C at 1 cm and 100 cm depths respectively. The extreme minimum soil temperatures at 0.3, 1, 10, 20 and 50 cm depths were lower than the corresponding values of last June, while at 2, 5 and 100cm depths the values were higher, the extreme differences were - 2.0°C and + 1.0°C at 0.3 and 5 cm depths respectively.

The mean daily wind speed at 2 metres above ground was 0.8 m/sec. higher than the corresponding value of June 1965. The mean daily values of Piche evaporation and water pan evaporation were 3.7 and 2.35 mm respectively higher than the corresponding values of June 1965. The total actual duration of bright sunshine was 1.5 hours higher than the corresponding value of last June.

**TABLE C 1.—AIR TEMPERATURE AT 2 METRES ABOVE GROUND
JUNE — 1966**

STATION	Air Temperature (°C)					Mean Duration in hours of daily air temperature above the following values.											
	Mean Max.	Mean Min.	Mean of the day	Night time mean	Day time mean	-5°C	0°C	5°C	10°C	15°C	20°C	25°C	30°C	35°C	40°C	45°C	
El Ksar	27.6	18.0	23.1	20.7	24.7	24.0	24.0	24.0	24.0	23.6	19.3	5.5	0.3	0.2	0.1	0.0	
Tahrir	34.4	18.9	26.1	22.5	28.9	24.0	24.0	24.0	24.0	24.0	21.3	12.5	6.5	1.1	0.1	0.0	
Giza	35.2	20.1	27.3	24.2	29.2	24.0	24.0	24.0	24.0	24.0	23.2	14.1	8.1	1.5	0.3	0.0	
Kharga	40.3	24.6	33.0	30.6	34.8	24.0	24.0	24.0	24.0	24.0	24.0	22.6	15.4	8.8	2.1	0.1	

**TABLE C 2.—ABSOLUTE VALUES OF AIR TEMPERATURE AT 2 METRES ABOVE GROUND,
ABSOLUTE MINIMUM AIR TEMPERATURE AT 5cms ABOVE GROUND OVER
DIFFERENT FIELDS.**

JUNE — 1966

STATION	Max. Temp. at 2 metres (°C)				Min. Temp. at 2 metres (°C)				Min. Temp. at 5 cms. above (°C)			
	Highest		Lowest		Highest		Lowest		Dry soil		Grass	
	Value	Date	Value	Date	Value	Date	Value	Date	Value	Date	Value	Date
El Ksar	43.2	2	24.0	5	21.9	18	12.8	16	10.4	16	—	—
Tahrir	42.9	2	30.8	5	23.1	2	16.6	3,7,17	13.9	17	—	—
Giza	43.3	9	31.5	29	22.2	3.27	17.5	17	15.0	12	12.0	2
Kharga	46.4	8	35.0	13	30.5	9	17.7	17	15.2	17	—	—

TABLE C 3.—(SOLAR+SKY) RADIATION, DURATION OF BRIGHT SUNSHINE, RELATIVE HUMIDITY, VAPOUR PRESSURE AT 2 METRES ABOVE GROUND, EVAPORATION & RAINFALL.

JUNE — 1966

STATION	(Solar+Sky) Radiation gm. cal/cm ²	Duration of Bright Sunshine (hours)			Relative Humidity. %				Vapour pressure (mms)						Evaporation(mms)	Rainfall (mms)		
		Total monthly	Actual monthly	Total Possible monthly	%	Duration in hours	Mean of day	1200 U.T.	Lowest	Date	Mean of day	1200 UT	Highest	Date	Low st	Date		
El Ksar .	585.5	366.0	424.9	86	—	—	75	63	12	2	16.1	16.2	20.8	26	7.4	2	12.0	11.16
Tahrir .	692.6	368.2	422.2	87	2	7	60	32	33	2	14.2	12.3	17.8	26	8.6	9	16.4	11.97
Giza .	692.7	363.1	421.6	86	1	3.1	53	29	10	9	13.2	11.2	18.4	19,27	6.1	18	19.6	13.20
Kharga .	578.7	376.4	410.3	91	0	0	22	14	7	17,19	7.9	7.5	15.1	20	3.3	3	46.9	24.22

**TABLE C 4.—EXTREME SOIL TEMPERATURE AT DIFFERENT DEPTHS
IN DIFFERENT FIELDS**

JUNE — 1966

STATION	(H) (L)	Extreme soil temperature (°C) in dry field at different depths (cms.)										Extreme soil temperature (°C) in grass field at different depths (cms.)									
		0.3	1	2	5	10	20	50	100	200	300	0.3	1	2	5	10	20	50	100	200	300
El Ksar . . .	H	58.0	47.3	47.2	42.0	35.8	29.5	26.9	25.0	22.6	—	—	—	—	—	—	—	—	—	—	—
	L	13.9	15.0	15.0	17.0	20.2	23.5	24.7	22.7	21.2	—	—	—	—	—	—	—	—	—	—	—
Tahrir	H	58.0	56.4	50.7	48.1	42.9	36.0	32.3	30.3	27.5	25.8	—	—	—	—	—	—	—	—	—	—
	L	17.6	18.8	19.0	22.4	25.2	28.7	29.6	27.3	25.1	24.1	—	—	—	—	—	—	—	—	—	—
Giza	H	65.6	60.7	59.0	46.4	39.9	34.4	32.5	29.8	26.2	24.6	39.9	34.9	34.0	31.6	29.9	28.0	26.5	24.2	22.2	—
	L	19.2	20.8	21.0	25.5	28.6	29.9	29.0	27.0	24.7	24.0	19.0	19.2	19.4	21.5	22.7	23.8	23.2	21.8	21.0	—
Kharga.	H	—	—	57.0	52.4	42.6	37.8	34.6	31.9	29.0	27.8	—	—	—	—	—	—	—	—	—	—
	L	—	—	22.6	25.0	29.6	32.0	31.8	29.7	27.7	26.9	—	—	—	—	—	—	—	—	—	—

TABLE C 5.—SURFACE WIND

JUNE— 1966

STATION	Wind Speed m/sec at 2 metres			Days with surface wind speed at 10 metres.								Max. Gust (knots) at 10 metres	
	Mean of the day	Night time mean	Day time Mean	≥ 10 knots	≥ 15 knots	≥ 20 knot	≥ 25 knots	≥ 30 knots	≥ 35 knots	≥ 40 knots	value (knots)	Date	
El Ksar. . . .	4.4	3.6	5.4	—	—	—	—	—	—	—	—	—	—
Tahrir.	3.2	2.6	4.0	30	27	6	1	0	0	0	29	29	3
Giza	3.1	2.7	3.5	30	24	7	0	0	0	0	28	28	8, 9
Kharza.	5.1	4.2	6.2	29	28	17	4	0	0	0	35	35	30

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